

GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Minor Irrigation – Development of Tank Information System in Andhra Pradesh – Administrative approval accorded under Normal State Plan Funds within the budget provision of M.I.- Orders – Issued.

IRRIGATION & CAD (MINOR IRRIGATION.GENL) DEPARTMENT

G.O.Ms.No. 139

Dated:16-09-2011

Read the following:

1. G.O.Rt.No.1157 I & CAD (MI.IV) Dept. dt. 14-07-2009
2. From Director General, A.P.S.R.A.C., Lr.No.APSRAC/CE/MI/TIS/2010, dated 30-12-2010, addressed to the CE., MI., and copy marked to the Government..
3. From Chief Engineer, Minor Irrigation, Lr.No.DCE.II/OT1/SO1/APSRSAC/2011, DT. 07-01-2011.
4. G.O.Ms.No.72 I & CAD (MI.III) Dept. Dt. 25-05-2011.
5. CE MI Lr.No.DCE(Spl)/OT(D)/AEE.5/Memoirs-outsourcing 2011;dt.09-09-11

ORDER :

1. The Tank memoir preparation work in respect of erstwhile Panchayat Raj tanks, mostly with 10-40 hectares (25-100 acres) Ayacut, was sanctioned in the reference 1st cited. More than 64 data elements grouped under four categories, namely; (i) Location details (ii) Hydrological particulars (iii) Standards of the tank (iv) Other relevant information are being collected. Tank memoirs are permanent records useful for taking up restoration and repair works as and when needed. An amount of Rs.24.804 crores was sanctioned for preparation of the memoirs by outsourcing the task to private firms. The CE-MI has informed, in the reference 5th cited that 16 agencies are engaged for preparation of Tank memoirs. These agencies are also gathering a) Video recordings of the Ayacut viewed from the tank bund b) Video recoding of tank bed and foreshore viewed from the tank bund, and (c) photographs of tank structures namely sluice, surplus weir and bund etc.,. The CE-MI has informed, vide reference 5th cited, that there are 20,868 tanks spread over 22 districts for which tank memoir preparation work has been entrusted. Out of this 10,817 tanks fall in the 8 TRIAD project districts. By now tank memoirs have been prepared for 14,798 tanks including 6,325 tanks in TRIAD Project districts.

2. In the reference 3rd read above, the Chief Engineer, Minor Irrigation has stated that the Director General, Andhra Pradesh State Remote Sensing Application Centre (Planning Department, Government of Andhra Pradesh), Ameerpet, Hyderabad, has furnished the project proposal vide reference 2nd read above, on the subject 'Development of Tank Information System (TIS)' using high resolution satellite remote sensing, GIS and GPS Techniques. The estimated cost of

the proposed study is about Rs.598.65 lakhs. The Chief Engineer, Minor Irrigation has requested for administrative approval. The Chief Engineer, Minor Irrigation has proposed this expenditure under Normal State Plan Funds with him, under the Head of Account 4702 NSP - MH 101 - GH 11 - SH 12- 530 Major Works / 531 Other expenditure.

3. In the reference 4th cited, the broad conceptual guidelines of the Tank Reliant Irrigation Area Development (TRIAD) project and coverage of Districts has been communicated in G.O.ms.No.72 I & CAD Department, dt. 25-05-2011. Eight districts namely Srikakulam, Vizianagaram, Visakhapatnam, Chittoor, Anantapur, Adilabad, Medak and Ranga Reddy, where more than 50% of the net irrigated area (NIA) is fed by tanks and other minor irrigation are to be considered under this project. Preliminary Project Report (PPR) is to be prepared on the basis of integrated study of the concerned areas, with help of Catchment study using Remote Sensing Data, Geographical Information System using Global Positioning System (GPS) data and Conventional Surface Hydrology. The Tank information System, proposed by the DG, APSRAC will generate the following information that can feed into preparation of preliminary project proposals for the TRIAD project.

- (a) Satellite data & Survey of India (SI) Topo sheets
- (b) Delineation of catchment area of tanks and cascades, including drainage, using 1:25000 SI toposheets, and where this is not available, using 1:50000 SI topo sheets.
- (c) Preparation of land cover and land use map of the area
- (d) Preparation of slope map using SI topo sheets.
- (e) Eyeballing of SI toposheets, group discussion and brainstorming to identify potential new tank sites and new cascades.

4. Government after careful consideration hereby agree with the proposal of Chief Engineer, Minor Irrigation and accord the administrative approval for Rs.598.65 lakhs (Rupees Five hundred ninety eight lakhs and sixty five thousand only) for Development of Tank Information System (TIS) in the State of Andhra Pradesh through Andhra Pradesh State Remote Sensing Applications Centre, Hyderabad subject to the following conditions:-

- (a) The APSRAC will assist the CE-MI to design a relational data base specifying field names data types and data length etc., for each of the data elements listed for Tank Memoir preparation work. A copy of the list of these data elements, obtained from the CE-MI titled as “Tank Memoir Draft Elements” is annexed to this order.
- (b) The tank memoir preparation agencies shall be asked to furnish data listed in the Annexure in the pre-defined database design to be distributed by the CE-MI. The data base design should allow for storage of hydrological estimation by multiple agencies and multiple methods referenced by agency and methods. In addition the agencies should be asked to furnish the formatted

tank memoir booklets in ‘pdf’ format and the photograph and video recordings in predefined formats to be specified by the CE-MI. A set of these deliverables shall be furnished to APSRAC.

- (c) The CE-MI is required to review with the respective agencies and ensure that tank memoir work is completed expeditiously in respect of the eight TRIAD project districts listed in the reference 4th cited.
- (d) The APSRAC shall extract or gather information on the Tank Memoir Data Elements in respect of the MI Tanks not covered by the Tank Memoir preparation project.
- (e) The A.P. State Remote sensing Applications Centre (APSRAC) shall expeditiously furnish the information at para 3 (a) to (c) above for the eight TRIAD Project districts, to the Commissioner, CAD, who is coordinating the TRIAD project preparation work.
- (f) The A.P. State Remote Sensing Applications Centre (APSRAC) shall utilize and correlate with the master plan record available with the Irrigation Department while proposing new tanks and cascades in a District.

5. Release of funds to APSRAC shall be in accordance with phase wise release plan to be approved by the Government and subject to achievement of targeted milestones and availability of corresponding deliverables.

6. The APSRAC should furnish 10 sets of the following deliverables.

- a) Drainage, catchment and command area boundaries of all tanks.
- b) Hydrogeomorphology.
- c) Land use / Land cover.
- d) Soils
- e) Rainfall distribution.
- f) Ground Water level scenario of the pre and post monsoon period of latest year.
- g) District wise report (A4 size) and a soft copy in PDF format as part of the project cost.

7. The phase wise release of payments as recommended by the Chief Engineer, Minor Irrigation is as follows.

| Sl | Description | % of payment on total project amount |
|----|-----------------------------------------------|--------------------------------------|
| 1 | Advance amount to initiate the work | 25 % |
| 2 | After completion of 8 TRIAD Project districts | 25 % |

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|---|------------------------------------------------------------------------------------------------------------------------------------------|------|
| | (Chittoor, Anantapur, Srikakulam, Visakhapatnam, Vizianagaram, Rangareddy, Medak and Adilabad) | |
| 3 | After completion of balance 14 Districts | 30 % |
| 4 | Installation of Tank Information System data base with Web based query and reporting facility at the office of the CE-MI, & Final Report | 20 % |

8. The Chief Engineer, Minor Irrigation is directed to monitor the physical and financial progress regularly to achieve the targets.

9. The expenditure is debitable to Normal State Plan Funds with Chief Engineer, Minor Irrigation under the Head of Account "4702 NSP-MH 101-GH 11- SH 12-530 Major Works /531 Other expenditure within the budget provision of the Minor Irrigation.

10. The Chief Engineer, Minor Irrigation is requested to take further necessary action in the matter.

11. This order issues with the concurrence of Finance (Exp.PW) Department vide their U.O.No.20081/A/587/A1.Exp.PW/11, dated 28-07-2011.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

DR.PRASANTA MAHAPATRA
PRINCIPAL SECRETARY TO GOVERNMENT

To
The Chief Engineer, Minor Irrigation,
Errum-Manzil, Hyderabad.

Copy to:
The Director General, APSRAC.,
Swarnajayanthi Complex, Ameerpet, Hyderabad-38.
Finance (Exp.PW.I) Department.
OSD to Hon'ble Minister (MI./L.I./APSIDC/GWD/WALAMTARI.
PS to Prl. Secretary to Government, I&CAD Dept.
PS to Spl. Secretary to Government, I&CAD Dept.
SF/SC

//forwarded: by order//

SECTION OFFICER